

IN THE CLAIMS:

1(Previously Presented). A throttle control mechanism for an engine driven pump, said pump having a fluid intake port and a fluid discharge port, said throttle control mechanism comprising:

a) an elongate cylinder having a first open end and a second closed end, said first end closed and fluidly sealed by an end block,

b) a fluid chamber within said end block, said fluid chamber in fluid communication with said cylinder,

c) a sliding piston within said cylinder, said piston including an axially extending throttle activation rod extending through said end block, said throttle activation rod connected to the throttle of said engine whereby movement of said piston, within said cylinder, causes movement of said throttle activation rod and said engine throttle,

d) sealing means between said piston and said cylinder,

e) biasing means between said piston and said closed end of said cylinder whereby said piston is biased against said end block,

f) a first fluid communicating conduit between said fluid chamber, within said end block, and the discharge port of said pump,

g) said first fluid communicating conduit having a pressure relief valve therein whereby fluid will flow from said pump discharge port to said fluid chamber within said end block, when the fluid pressure within said pump discharge port exceeds a predetermined pressure,

h) a second fluid communicating conduit fluidly communicating with said first fluid communicating conduit between said relief valve and said fluid chamber within said end block, said second fluid communicating conduit fluidly communicating between said first fluid communicating conduit and the atmosphere,

i) a fluid restricting orifice within said second fluid communicating conduit whereby said orifice creates a reduced fluid pressure within said first and second fluid communicating conduits and said fluid chamber, within said end block, as fluid passes therethrough.

2(Previously Presented). The throttle control mechanism as claimed in claim 1 including:

a) an electrically operated three way exhaust valve positioned, within said second fluid communicating conduit, between said orifice and said first fluid communicating conduit, said exhaust valve having one fluid inlet port and a first and second exhaust port, said first exhaust port normally open and fluidly communicating with said orifice, said second exhaust port normally closed and having means for opening said port upon demand,

b) a pressure sensing device for sensing fluid pressure within said second fluid communicating conduit, between said first fluid communicating conduit and said three way exhaust valve, whereby upon sensing a predetermined fluid pressure within said second fluid communication conduit said pressure sensing device opens said second exhaust port of said three way exhaust valve.

3 (Original). The throttle control mechanism as claimed in claim 1 including a fluid damping reservoir in fluid communication with said cylinder.

4-13 (Canceled).

14 (Currently Amended). A throttle control mechanism for an engine driven pump, said pump having an intake port and a discharge port, said throttle control mechanism comprising:

a movable member, the movable member operatively connected with a throttle link and biased to place the throttle into a standard operating position,

a liquid receiving chamber adjacent the movable member, and

~~—— a liquid feed system for controlling liquid pressure in the liquid receiving chamber, the liquid feed system comprising:~~

a liquid input in communication with liquid discharged from the discharge port,

a chamber pressurization path in communication with liquid that enters the liquid input, the chamber pressurization path leading to the liquid receiving chamber;

a liquid output path for diverting some liquid that enters the liquid input ~~out of the liquid feed system via~~ to a liquid output of the liquid feed system, and

the throttle control mechanism configured to respond to liquid pressure applied at the liquid input so that when liquid pressure applied at the liquid input reaches a threshold high pressure:

(i) liquid communication between the liquid input and the ~~chamber pressurization~~ path is provided, and

(ii) liquid communication between the liquid input and the liquid output via the liquid output path is provided, with the liquid output responsively releasing some liquid so that a pressure condition produced in the liquid ~~receiving~~ chamber via the ~~chamber pressurization~~ path is reduced as compared to the threshold high pressure; and

(iii) the pressure condition overcomes bias on the movable member and causes the movable member to move thereby causing the throttle activation rod to move in a throttle speed reducing direction;

wherein the liquid ~~receiving~~ chamber is at one side of the movable member and the mechanism further includes a damping reservoir in fluid communication with an opposite side of the movable member.

15 (Currently Amended). The throttle control mechanism of claim 14 wherein the damping reservoir is sealed from communication with the liquid ~~receiving~~ chamber.

16 (Previously Presented). The throttle control mechanism of claim 15 wherein the movable member comprises a piston within a cylinder.

17 (Currently Amended). A throttle control mechanism for an engine driven pump, said pump having an intake port and a discharge port, said throttle control mechanism comprising:

a movable member, the movable member operatively connected with a throttle link and biased to place the throttle into a standard operating position,

a liquid ~~receiving~~ chamber adjacent the movable member, and

a liquid feed system for controlling liquid pressure in the liquid receiving chamber, the liquid feed system comprising:

a liquid input in communication with liquid discharged from the discharge port,
a ~~chamber pressurization~~ path in communication with liquid that enters the liquid input,
the ~~chamber pressurization~~ path leading to the liquid ~~receiving~~ chamber;
a liquid output path for diverting some liquid that enters the liquid input ~~out of the liquid feed system via~~ to a liquid output ~~of the liquid feed system~~, and
the throttle control mechanism configured to respond to liquid pressure applied at the liquid input so that when liquid pressure applied at the liquid input reaches a threshold high pressure:

(i) liquid communication between the liquid input and the ~~chamber pressurization~~ path is provided, and

(ii) liquid communication between the liquid input and the liquid output via the liquid output path is provided, with the liquid output responsively releasing some liquid so that a pressure condition produced in the liquid ~~receiving~~ chamber via the ~~chamber pressurization~~ path is reduced as compared to the threshold high pressure; and

(iii) the pressure condition overcomes bias on the movable member and causes the movable member to move thereby causing the throttle activation rod to move in a throttle speed reducing direction;

wherein the liquid input comprises a relief valve having a pressure limit set at the threshold high pressure, the liquid output comprises a flow limiting orifice.

18 (Previously Presented). The throttle control mechanism of claim 21 wherein the moveable member is biased by a spring.

19 (Previously Presented). A building sprinkler system including the throttle control mechanism of claim 21, wherein the discharge port of said pump is connected to deliver water to sprinklers of the sprinkler system.

20 (Previously Presented). A building sprinkler system including the throttle control mechanism of claim 1, wherein the discharge port of said pump is connected to deliver water to sprinklers of the sprinkler system.

21 (Currently Amended). A throttle control mechanism for an engine driven pump, said pump having an intake port and a discharge port, said throttle control mechanism comprising:

a movable member, the movable member operatively connected with a throttle link and biased to place the throttle into a standard operating position,

a liquid receiving chamber adjacent the movable member, and

~~a liquid feed system for controlling liquid pressure in the liquid receiving chamber, the liquid feed system comprising:~~

a liquid input in communication with liquid discharged from the discharge port,

~~a chamber pressurization path in communication with liquid that enters the liquid input, the chamber pressurization path leading to the liquid receiving chamber;~~

~~a liquid output path for diverting some liquid that enters the liquid input out of the liquid feed system via to a liquid output of the liquid feed system, and~~

the throttle control mechanism configured to respond to liquid pressure applied at the liquid input so that when liquid pressure applied at the liquid input reaches a threshold high pressure:

(i) liquid communication between the liquid input and the ~~chamber pressurization~~ path is provided, and

(ii) liquid communication between the liquid input and the liquid output via the liquid output path is provided, with the liquid output responsively releasing some liquid so that a pressure condition produced in the liquid receiving chamber via the ~~chamber pressurization~~ path is reduced as compared to the threshold high pressure; and

(iii) the pressure condition overcomes bias on the movable member and causes the movable member to move thereby causing the throttle activation rod to move in a throttle speed reducing direction.